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CLAIMS

1. A method of screening for schizophrenia, comprising the step of:

(a) assaying a nucleic acid sample for the presence of a codon encoding arginine at amino acid position 241 of the ICAM-1 protein,

wherein the presence of a codon encoding arginine at amino acid position 241 of the ICAM-1 protein is indicative of a schizophrenia.

2. The method according to claim 1, wherein the method further comprises the step of obtaining a nucleic acid sample prior to said step (a).

3. A method according to claim 1, wherein said assaying comprises amplification of the ICAM-1 gene or a suitable fragment thereof by a technique suitable therefore.

4. A method according to claim 3, wherein said amplification comprises polymerase chain reaction with the primers having the sequences SEQ ID NO: 1 and SEQ ID NO: 2.

5. A method according to claim 4, wherein said amplification further comprises a SNAPshot polymerase chain reaction with the SNAPshot primer having the sequence SEQ ID NO: 3.

6. A method according to claim 1, wherein the nucleic acid sample is isolated from blood cells.

7. A method according to claim 1, wherein the method further comprises assaying said sample for an additional marker associated with the susceptibility for

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schizophrenia, said marker being the G1188T IL-12 single nucleotide polymorphism.

- 5 8. A use of a kit for screening for schizophrenia comprising reagents tailored to identify the polymorphism at amino acid position 241 of the ICAM-1 protein.
9. A use according to claim 8, wherein said reagents comprise primers having the sequences SEQ ID NO: 1 and SEQ ID NO: 2 and reagents necessary to perform PCR.
- 10 10. A use according to claim 9, wherein said reagents further comprise the SNAP-shot primer having the sequence SEQ ID NO: 3.
11. A use of a kit according to claim 8, wherein the kit further comprises reagents
15 tailored to identify the G1188T IL-12 single nucleotide polymorphism.
12. A use according to claim 11, wherein said reagents comprise primers selected from SEQ ID NO: 4 and SEQ ID NO: 5.
- 20 13. A use of a method according to claims 1 to 7 for predicting clinical response to a therapeutic compound in the treatment of ICAM-1 mediated schizophrenia.
14. A method of screening for schizophrenia, comprising the step of:

(a) assaying a protein sample for the presence of the ICAM-1 protein
25 having the 241A polymorphism,

wherein the presence of said polymorphism is indicative of a schizophrenia.
15. A method according to claim 14, wherein said sample is a blood sample and
30 the ICAM-1 protein is soluble.

- 5 16. A method according to claim 15, wherein comparative samples are obtained from healthy normal controls and used to compare to said samples taken from suspect individuals wherein lower serum levels of sICAM-1 protein is indicative of schizophrenia.
17. A method according to claim 16, wherein the protein sample is isolated from blood cells.
- 10 18. A method according to claim 17, wherein the method further comprises assaying said sample for an additional marker associated with the susceptibility for schizophrenia, said marker being the G1188T IL-12 single nucleotide polymorphism.
- 15 19. A use of a blood kit for screening for schizophrenia comprising reagents tailored to identify the polymorphism at amino acid position 241 of the ICAM-1 protein.
- 20 20. A use of a kit according to claim 19, wherein the kit further comprises reagents tailored to identify the G1188T IL-12 single nucleotide polymorphism.
- 25 21. A use of a method according to claims 14 to 20 for predicting clinical response to a therapeutic compound in the treatment of ICAM-1 mediated schizophrenia.
22. An antibody specifically reactive to ICAM-1 G241 protein.
23. An antibody specifically reactive to ICAM-1 241A protein.
- 30 24. An antibody according to claim 22 specifically reactive to an epitope containing the G241 amino acids of ICAM-1.

25. An antibody according to claim 23 specifically reactive to an epitope containing the 241A amino acids of ICAM-1.
- 5 26. A treatment for schizophrenia comprising measuring and detecting the presence of the 241A polymorphism in an individual or population followed by the administration of agents useful for the treatment of schizophrenia.